

What is claimed is:

1. (original) A stapedial prosthesis sized to be implanted as a replacement for the stapes between the incus and the oval window of the middle ear, comprising:

- a) a body defining a bucket sized to at least partially receive a portion of the incus, and a shaft having a length sufficient to extend from the incus to the oval window; and
- b) a spring-loaded handle coupled to said bucket.

2. (original) A stapedial prosthesis according to claim 1, wherein:

said handle is constructed of titanium.

3. (original) A stapedial prosthesis according to claim 2, wherein:

said titanium is commercial pure grade 4 titanium.

4. (original) A stapedial prosthesis according to claim 1,  
wherein:

said bucket includes a wall with holes therein, and said handle is U-shaped and has two ends which are received, under load, in said holes of said bucket.

5. (original) A stapedial prosthesis according to claim 4,  
wherein:

said holes in said bucket are diametrically opposed.

6. (original) A stapedial prosthesis according to claim 1,  
wherein:

said bucket includes a rim and a notch in said rim.

7. (original) A stapedial prosthesis according to claim 6,  
wherein:

said bucket includes a wall with holes therein, and said handle is U-shaped and has two ends which are received, under load, in said holes of said bucket, and said notch terminates above said holes.

8. (original) A stapedial prosthesis according to claim 1, wherein:

said bucket has a wall with a plurality of slots defining wall segments, and said wall segments are manipulatable to adjust an inner dimension of said bucket.

9. (original) A stapedial prosthesis sized to be implanted as a replacement for the stapes between the incus and the oval window of the middle ear, comprising:

a) a body defining a bucket sized to at least partially receive a portion of an incus, and a shaft having a length sufficient to extend from the incus to the oval window; and

b) a handle rotatably coupled to said bucket,

wherein said handle is constructed from titanium.

10. (original) A stapedial prosthesis according to claim 9, wherein:

said handle is constructed from commercially pure grade 4 titanium.

11. (original) A stapedial prosthesis according to claim 9,  
wherein:

said body is constructed of titanium.

12. (original) A stapedial prosthesis according to claim 11,  
wherein:

said body is constructed of commercial pure Grade 2  
titanium.

13. (original) A stapedial prosthesis according to claim 9,  
wherein:

said handle is spring-loaded.

14. (original) A stapedial prosthesis sized to be implanted as a  
replacement for the stapes between the incus and the oval window  
of the middle ear, comprising:

a) a body defining a bucket and a shaft, said bucket sized to  
at least partially receive a portion of an incus and having a  
wall with a plurality of slots defining wall segments, said  
bucket being adjustable in size by manipulation of said wall

segments, and said shaft having a length sufficient to extend from the incus to the oval window; and

b) a bail handle coupled to said bucket.

15. (original) A stapedial prosthesis according to claim 14, wherein:

said slots are approximately 0.1-mm wide.

16. (original) A stapedial prosthesis according to claim 15, wherein:

said slots define arcs about a circumference of the bucket which are substantially smaller than arcs traversed by the wall segments defined by the slots.

17. (original) A stapedial prosthesis according to claim 15, wherein:

said arcs defined by said slots are smaller than said arcs defined by said wall segments by a factor of at least four.

18. (original) A stapedial prosthesis according to claim 14,  
wherein:

said bucket has a closed bottom portion.

19. (original) A stapedial prosthesis sized to be implanted as a  
replacement for the stapes between the incus and the oval window  
of the middle ear, comprising:

a) a shaft having a length sufficient to extend from a portion  
of an incus to the oval window, said shaft having a central  
portion and first and second end portions, said central portion  
having a smaller diameter than said first end portion; and

b) a structure coupled to said second end portion of said  
shaft at which a portion of the incus may be coupled to said  
shaft.

20. (original) A stapedial prosthesis according to claim 19,  
wherein:

said structure is a bucket.

21. (original) A stapedial prosthesis according to claim 20,  
wherein:

said structure further includes a handle movable relative  
to said bucket.

22. (original) A stapedial prosthesis according to claim 19,  
wherein:

said first end portion includes structure for tissue  
ingrowth.

23. (original) A stapedial prosthesis according to claim 19,  
wherein:

said first end portion has a length not exceeding 1-mm.

24. (original) A stapedial prosthesis according to claim 19,  
wherein:

said first end portion has a length greater than 0.3-mm.

25. (original) A stapedial prosthesis according to claim 19, wherein:

said central portion has a diameter of approximately 0.3-mm and said first end portion has a diameter of approximately 0.4-mm to 0.8-mm.

26. (original) A stapedial prosthesis according to claim 19, wherein:

said central portion has a length at least approximately 2.4 times a length of said first end.

27. (original) A stapedial prosthesis sized to be implanted as a replacement for the stapes between the incus and the oval window of the middle ear, comprising:

a) a body defining a bucket with a cavity sized to at least partially receive a portion of an incus, said bucket including a wall with openings therein, and a shaft having a length sufficient to extend from the incus to the oval window; and

b) a handle element coupled to said bucket at said openings, said handle element not substantially protruding into said cavity.



28. (original) A stapedial prosthesis sized to be implanted as a replacement for the stapes between the incus and the oval window of the middle ear, comprising:

a) a body defining a bucket with a cavity sized to at least partially receive a portion of an incus, and a shaft having a length sufficient to extend from the incus to the oval window; and

b) a handle element having first and second ends, said handle element coupled to said bucket, and first and second ends each being (i) uncoupled from the other and (ii) not passing the other within said bucket.

29. (original) A method of implanting a stapedial prosthesis between the incus and oval window of the middle ear, comprising:

a) providing a stapedial prosthesis including a bucket having a wall, a shaft fixed to the bucket, and a spring-loaded bail handle movably coupled to the bucket, the bail handle oriented so as to provide clear entry to the bucket;

b) positioning a portion of the incus into the bucket; and

c) moving the bail handle until the bail handle contacts the incus.

30. A method according to claim 29, further comprising:

d) bending,

wherein said providing includes providing the bucket of the prosthesis with a plurality of wall segments, and said bending includes bending one or more segments of the wall of the bucket.

31. A method according to claim 30, wherein:

said bending includes bending one or more segments until at least one of the segments contacts the incus.

32. A method according to claim 30, wherein:

said bending occurs before said moving.

33. A method according to claim 30, wherein:

said bending occurs after said moving.

34. A method according to claim 29, wherein:

said moving the bail handle includes rotating the bail handle.

35. A method according to claim 34, wherein:

said moving the bail handle includes pulling the bail handle over a portion of the incus.

36. A method according to claim 35, wherein:

said moving the bail handle includes causing the bail handle to pass through a plane containing both the bail handle and a longitudinal axis of the bucket and the shaft.

37. A method according to claim 29, wherein:

said moving the bail handle includes biasing the incus relative to the bucket with the spring-loaded bail handle.

38. A method according to claim 29, wherein:

after said moving, the bail handle is substantially fixed relative to the bucket via the spring-load on the bail handle.

39. A method according to claim 29, wherein:

said providing includes providing a stapedial prosthesis with a titanium bail handle.